AMENDMENTS TO THE CLAIMS:

This Listing of Claims will replace all prior versions and listings of claims in the subject Patent Application:

1. (Withdrawn) A method for enhancing a video signal comprising:

mapping a luminance range of the video signal;

selecting a neutral point located at a dark point in the luminance range; and

processing the video signal by suppressing luminance to a darker side of the neutral point and enhancing luminance to a brighter side of the neutral point.

2. (Withdrawn) The method for enhancing a video signal of claim 1, whereby processing provides less contrast in dark regions and more contrast in bright regions of the video signal.

3. (Withdrawn) The method for enhancing a video signal of claim 1, further comprising:

creating a luminance-mapping curve with at least one inflection point such that at lease one region has a concave upward arc and another region has a concave downward arc; and

applying the luminance-mapping curve to the luminance signal to enhance both brightness and contrast.

4. (Withdrawn) The method for enhancing a video signal of claim 3, further comprising:

adaptively adjusting the luminance-mapping curve over time according to an average luminance level of the video signal.

5. (Withdrawn) The method for enhancing a video signal of claim 4, whereby the luminance-mapping curve is adapted over time by measuring mean and variance of the luminance signal and generating an adjustment to the luminance-mapping curve according to the measurements.

6. (Withdrawn) The method for enhancing a video signal of claim 5, whereby the luminance-mapping curve is shifted in order to provide good contrast and preserve average luminance level after luminance mapping through time.

7. (Withdrawn) The method for enhancing a video signal of claim 4, further comprising:

adjusting chrominance signals according to a change in luminance to preserve color saturation level.

8. (Withdrawn) The method for enhancing a video signal of claim 7, further comprising:

creating a chrominance-mapping curve; and

applying the chrominance-mapping curve to the chrominance signals to improve the color saturation level and improve the contrast of color chrominance components.

9.   (Withdrawn) The method for enhancing a video signal of claim 1, whereby only selected regions of the video signal are processed.

10.   (Withdrawn) The method for enhancing a video signal of claim 1, further comprising:

dithering to reduce effects due to high contrast in certain luminance levels.

11.   (Currently amended) A method for enhancing a video signal comprising:

obtaining intensity of luminance values and variation of chrominance values;

calculating average and variance of said luminance values and said chrominance values;

calculating a luminance-contrast adjustment based upon said luminance values;

constructing a luminance curve responsive to a luminance-mapping curve undulating about a point of inflection defined by a neutral point;

constructing a final enhancement mapping curve based on values of control factor intensity and said luminance values, wherein both ends of the final enhancement mapping curve may be re-interpolated to provide a soft-clipping effect;

constructing a chrominance curve based upon said chrominance values; and

applying the luminance curve, the final enhancement mapping curve, and the chrominance curve to the video signal.

12.   (Original) The method for enhancing a video signal of claim 11, whereby some or all of the operations are performed for every frame of the video signal.

13.   (Original) The method for enhancing a video signal of claim 11, whereby the intensity and variation are input by a user.

14.   (Original) The method for enhancing a video signal of claim 11, whereby the curves are realized as a fixed-point lookup table and mapping

calculations are realized by table watching or third order or higher polynomials are used to emulate the curves.

15. (Original) The method for enhancing a video signal of claim 11, further comprising:

obtaining an output luminance signal;

obtaining an output chrominance signal; and

restoring color saturation from chrominance adjustment.

16. (Currently amended) A method for enhancing a video signal comprising:

obtaining user-input intensity of luminance values and variation of chrominance values;

calculating average of said luminance values, variance of said luminance values, and variance of said chrominance values;

calculating luminance-contrast adjustment from intensity of said luminance values, average of said luminance values, and variance of said luminance values;

constructing a luminance curve from a luminance-mapping curve, intensity of said luminance values, and luminance-contrast adjustment, the

luminance-mapping curve undulating about a point of inflection defined by a neutral point;

constructing a final enhancement mapping curve based on values of control factor intensity and said luminance values, wherein both ends of the final enhancement mapping curve may be re-interpolated to provide a soft-clipping effect;

constructing a chrominance curve from variation of said chrominance values and variance of said chrominance values; and

applying the luminance curve, the final enhancement mapping curve, and the chrominance curve to the video signal.

17. (Original) The method for enhancing a video signal of claim 16, whereby the curves are realized as a fixed-point lookup table and mapping calculations are realized by table watching.

18. (Original) The method for enhancing a video signal of claim 16, whereby third order or higher polynomials are used to emulate the curves.

19. (Original) The method for enhancing a video signal of claim 16, further comprising:

obtaining an output luminance signal;

obtaining an output chrominance signal; and

restoring color saturation from chrominance adjustment.

20. (Original) The method for enhancing a video signal of claim 19, whereby the operations of obtaining the output luminance signal, obtaining the output chrominance signal, and restoring color saturation from chrominance adjustment are performed for every pixel.